

REMARKS

Claims 12-23, 28 and 29 have been cancelled without prejudice or disclaimer.

Claim 30 has been added. Proper support for newly added claim 30 is found in the specification, at least at paragraphs [0021] through [0024]. New claim 30 drawn to a donor film of an organic electroluminescent display device, the donor film comprising, amongst other novel features, a first substrate; a photothermal conversion layer formed on an upper part of the first substrate; and a transfer layer comprising a plurality of films formed on an upper part of the photothermal conversion layer and including a material comprising a low molecular weight organic electroluminescent material, wherein an adhesion force between the plurality of films of the transfer layer is less than an adhesion force between the first substrate and the plurality of films of the transfer layer. None of the references, whether taken singly or combined, teach or suggest such novel features. Accordingly, Applicants believe that claim 30 is in condition for allowance.

Claims 1-3, 5-11, 24, 26, 27 and 30 are pending. Claims 1, 24 and 30 are the independent claims. No new matter is presented in this Amendment.

REJECTIONS UNDER 35 U.S.C. §102/103:

Claims 1-3, 5, 7-11, 24 and 26 are rejected under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Kwon et al. (U.S. Patent EP 0 851 714).

Applicants respectfully traverse this rejection for at least the following reason.

Regarding the rejection of independent claim 1, it is noted that claim 1 recites a donor film of a low molecular weight full color organic electroluminescent display device comprising, amongst other novel features, a substrate film; a photothermal conversion layer formed on an upper part of the substrate film; and a transfer layer formed on an upper part of the photothermal conversion layer and formed of a material comprising a low molecular weight material, wherein the transfer layer comprises a hole blocking layer.

Kwon discloses a donor film for an organic EL device including a light-absorbing layer and a transfer layer formed on a base film (page 3, lines 54-55). Kwon further discloses that the

transfer layer is formed of at least one of a luminous material, a hole transport low/high molecular weight compound and an electron transport low/high molecular weight compound (page 4, lines 14-16). Accordingly, Kwon discloses a transfer layer, including a hole transport compound and an electron transport compound. The Office Action recognizes that Kwon does not recite a hole blocking layer, but indicates that since Kwon teaches a layer comprising a TAZ material, which is used for forming a hole blocking layer, the layer described by Kwon is a "hole blocking layer."

The Office Action further states that electron transporting materials are known in the art as having a hole blocking function as evidenced in Kido (U.S. Patent No. 5,869,199), at column 7, lines 38-52. Applicants respectfully traverse this characterization for at least the following reason.

Kido discloses that TAZ is excellent in both electron-transport properties and hole-blocking properties (column 7, lines 38-52). In other words, Kido discloses that TAZ can be used in an electron transport layer or in a hole-blocking layer. That is, TAZ can be used in more than one layer because it has distinct properties, electron-transport properties and hole-blocking properties. Therefore, Kido teaches that TAZ has various properties.

Accordingly, although Kwon discloses a layer having a TAZ material, and TAZ can be used in a hole blocking layer, it cannot be implied that the layer taught by Kwon is a hole blocking layer since TAZ can also be used in an electron transport layer.

Furthermore, TAZ can also be used as a material in the formation of other layers, such as a hole injection layer or a hole transporting layer.

Accordingly, Applicants respectfully assert that the rejection of claim 1 under 35 U.S.C. § 102 or 35 U.S.C. §103 should be withdrawn because Kwon fails to teach or suggest each feature of independent claim 1, and in particular the hole blocking layer.

As pointed out in MPEP § 2131, "[t]o anticipate a claim, the reference must teach every element of the claim." Thus, "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. v. Union Oil Co. Of California, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987)."

Furthermore, Applicants respectfully assert that the rejection of dependent claims 2, 3, 5, 7-11 and 26 under 35 U.S.C. §§102 and 103 should be withdrawn at least because of their

dependence from claim 1 and the reasons set forth above, and because the dependent claims include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 2, 3, 5, 7-11 and 26 also distinguish over the prior art.

Regarding the rejection of independent claim 24, it is noted that claim 24 recites a low molecular weight full color organic electroluminescent device comprising, amongst other novel features, a first organic film layer comprising a hole injection layer and/or a hole transporting layer, when the first electrode is an anode and wherein the first organic film layer comprises an electron transporting layer, a hole blocking layer and an electron injection layer, when the first electrode is a cathode.

As noted above, although Kwon discloses a layer having a TAZ material, and TAZ can be used in a hole blocking layer, it cannot be implied that the layer is a hole blocking layer. In particular, given the fact that TAZ can also be used as a material in the formation of other layers, such as a hole injection layer or a hole transporting layer.

Accordingly, Applicants respectfully assert that the rejection of claim 24 under 35 U.S.C. § 102 or 35 U.S.C. §103 should be withdrawn because Kwon fails to teach or suggest each feature of independent claim 24.

Claims 1-3, 6-9, 11 and 24 are again rejected under U.S.C. §102(e) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Akai (US 2003/0045021).

Applicants respectfully traverse this rejection for at least the following reasons.

Regarding the rejection of independent claim 1, it is noted that claim 1 recites a donor film of a low molecular weight full color organic electroluminescent display device comprising, amongst other novel features, a substrate film; a photothermal conversion layer formed on an upper part of the substrate film; and a transfer layer formed on an upper part of the photothermal conversion layer and formed of a material comprising a low molecular weight material, wherein the transfer layer comprises a hole blocking layer.

Akai discloses a method of forming an organic EL device including forming a first electrode on a substrate, forming an organic film including a light emitting layer on the first electrode, forming an electrically conductive and light transmissive protection layer on the organic film, and forming a transparent second electrode on the protection layer by a sputtering

method (paragraph [0046]). Akai further discloses that the organic film includes an electron injection layer, an electron transportation layer, the light emitting layer, a hole transportation layer and a hole injection layer, stacked on the first electrode (paragraph [0051]).

The Office Action recognizes that Akai does not teach or use the express term of "a hole blocking layer," but indicates that since Akai discloses a layer having triazole derivatives, which in turn have hole-blocking properties, Akai discloses the features of the claim. The Office Action further states that electron transport materials have hole blocking functions and relies on Kido for such characterization.

However, as noted above, although Kido teaches that triazole derivatives have excellent electron-transport properties and excellent hole blocking properties, this implies that more than one type of layer can be formed using TAZ. Therefore, it cannot be asserted that the layer taught by Kwon is in fact a hole blocking layer simply because it utilizes TAZ.

Therefore, Akai fails to teach or suggest a hole blocking layer, as recited in independent claim 1.

Accordingly, Applicants respectfully assert that the rejection of claim 1 under 35 U.S.C. § 102(e) or 35 U.S.C. § 103(a) should be withdrawn because Akai fails to teach or suggest each feature of independent claim 1.

Additionally, regarding the rejection of dependent claim 7, it is noted that this claim recites that the transfer layer further includes an electron injecting layer formed of one selected from the group consisting of 1,3,4-oxadiazole derivative, 1,2,4-triazole derivative, Alq₃, Ga complex, and PBD.

Akai on the other hand discloses at paragraph [0052] that materials for the light emitting layer include tris(8-hydroxy-nate)aluminum (Alq₃), bis(2-methyl-8-quinolinolato)(p-phenylphenolato)aluminum (BALq), benzoxazole materials, and benzothiazole materials. Furthermore, at paragraph [0054] Akai discloses that an electron injection layer and an electron transportation layer include oxadiazole derivatives, tris(8-hydroxy-nate)aluminum (Alq₃) and triazole derivatives. That is, Akai discloses using the (Alq₃) in more than one layer and also discloses using more than one material. Accordingly, it is respectfully requested that Akai fails to teach or suggest at least this novel feature of claim 7.

Furthermore, Applicants respectfully assert that the rejection of dependent claims 3, 6-9

and 11 under 35 U.S.C. §§102 and 103 should be withdrawn at least because of their dependence from claim 1 and the reasons set forth above, and because the dependent claims include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 3, 6-9 and 11 also distinguish over the prior art.

Regarding the rejection of independent claim 24, it is noted that claim 24 recites a low molecular weight full color organic electroluminescent device comprising, amongst other novel features, a first organic film layer comprising a hole injection layer and/or a hole transporting layer, when the first electrode is an anode and wherein the first organic film layer comprises an electron transporting layer, a hole blocking layer and an electron injection layer, when the first electrode is a cathode.

As noted above Akai fails to teach or suggest a hole blocking layer.

Accordingly, Applicants respectfully assert that the rejection of claim 24 under 35 U.S.C. § 102(e) or 35 U.S.C. §103(a) should be withdrawn because Akai fails to teach or suggest each feature of independent claim 24.

REJECTIONS UNDER 35 U.S.C. §103:

Claim 27 is again rejected under 35 U.S.C. §103(a) as being unpatentable over Kwon et al. (EP 0 851 714) in view of Fujita et al. (US 2003/0008224).

Applicants respectfully traverse this rejection for at least the following reason.

Claim 27 depends from independent claim 1 and as noted above, Kwon fails to teach or suggest the features recited in independent claim 1.

Fujita discloses an organic LED display panel comprising a plurality of pixels each constituted by an organic LED device which includes a first electrode, an organic LED layer (organic layer) comprised of at least one light emitting layer, and a second electrode (paragraph [0021]). Fujita further discloses that the organic LED donor film is prepared by depositing a hole injecting material, a hole transporting material, a light emitting material and an electron transporting material (paragraph [0027]). Fujita makes no reference or suggestion of a transfer layer comprising, amongst other novel features, a hole blocking layer. Accordingly, Fujita fails to cure the deficiencies of Kwon.

Therefore, Applicants respectfully assert that the rejection of claim 27 under 35 U.S.C. §

103(a) should be withdrawn because neither Kwon nor Fujita, whether taken singly or combined teach or suggest each feature of independent claim 1 from which claim 27 depends.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

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